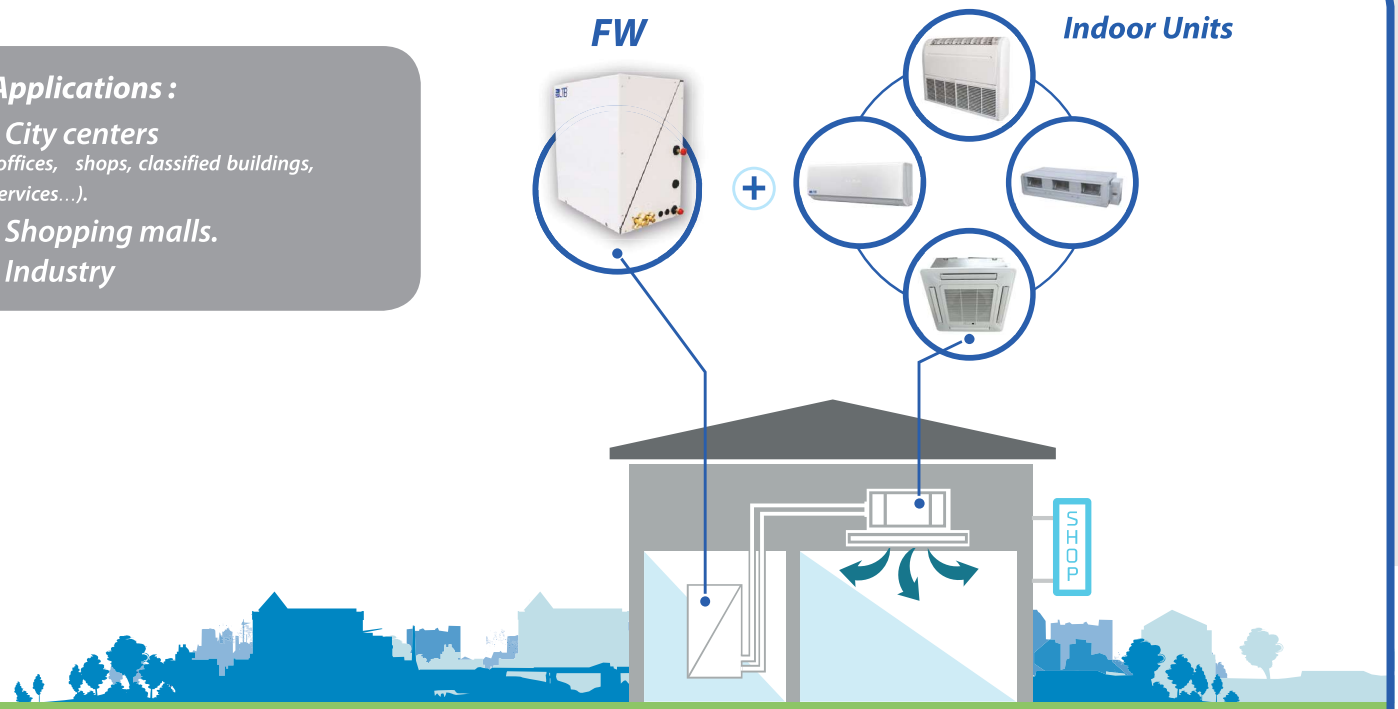
Applications :

- *City centers*
  (offices, shops, classified buildings, services…).
- *Shopping malls.*
- *Industry*



FW range
Water-cooled condenser Split System - NEO

Water-cooled condenser Split System - NEO

Cooling only Range

The most water-efficient on the market !

FW

Direct Expansion

The unit is installed inside the building.
Calories are evacuated in a flow of water.

Indoor Units

⊕ MI

⊕ CI

⊕ KI

⊕ GI

Applications

- City centers (offices, shops, classified buildings, services, etc.).
- Shopping malls
- Industry.

Product benefits

- No outdoor unit.
- No grid on the facade of the building
- Small-sized and easy to install.
- ON/OFF : easy to maintain.
- The most water-efficient of the market.
- Included as standard feature: Pressostatic water valve.

Build your PART NUMBER (P/N)

W	Q	F	1	0	4	B	H

MODEL CODE 6 characters — OPTIONS Pack 2 characters

Don't forget to order the accessories you may need !

Refrigerant connections

- Max length : 20 m.
- Max height difference : 5 m.
- Preloaded for 4 m of refrigerant lines.

The power ratings indicated in the tables are "total power" and are delivered for an indoor air (indoor unit inflow) of +27°C / 50% RH (cooling mode). Notice: the power available to cool down the inside air ("sensible power") equals the "total power" minus the power absorbed by the condensation of air moisture (condensate).

R407C



Size		07	09	14	18	24	36	40	50	64	80
Model		FW07Q6	FW09Q6	FW14Q6	FW18Q6	FW24Q6	FW36Q6	FW40QY	FW50QY	FW64QY	FW80QY
Model code		WQF101	WQF102	WQF103	WQF104	WQF105	WQF106	WQF107	WQF108	WQF109	WQF110
Rated cooling power (1)	[kW]	2,0	2,5	3,3	5,0	7,0	8,8	9,5	12,3	14,0	17,5
EER	-	2,85	2,95	2,95	3,12	3,68	3,14	3,65	3,85	3,58	3,80
Electrical power supply	V-Ph-Hz	230-1-50	230-1-50	230-1-50	230-1-50	230-1-50	230-1-50	400-3-50 +N	400-3-50 +N	400-3-50 +N	400-3-50 +N
Rated absorbed electrical power	[kW]	0,7	0,8	1,1	1,6	1,9	2,8	2,6	3,2	3,9	4,6
Rated current	[A]	3,8	4,5	5,7	8,5	9,3	13,2	5,2	5,7	7,0	8,2
Maximum current	[A]	4,1	4,7	6,6	8,8	11,0	14,6	7,3	8,4	10,5	12,4
Power supply cable	[mm²]	3 x 1,5	3 x 1,5	3 x 1,5	3 x 2,5	3 x 2,5	3 x 4,0	5 x 2,5	5 x 2,5	5 x 2,5	5 x 2,5
Connection cable (4)	[mm²]	4 x 1,5	4 x 1,5	4 x 1,5	4 x 1,5	4 x 1,5	4 x 1,5	4 x 1,5	4 x 1,5	4 x 1,5	4 x 1,5
Dimensions (LxDx**h**)	[mm]	600x310 x430	600x310 x430	600x310 x430	600x310 x430	600x310 x430	600x360 x630	800x360 x630	800x360 x630	800x360 x630	800x360 x630
Weight	[kg]	33	34	37	41	42	55	70	72	75	78
Sound pressure (at 1m)	[dB(A)]	47	47	47	48	49	49	49	49	49	50
Liquid line - Suction line	[inch]	1/4"-3/8"	1/4"-3/8"	1/4"-1/2"	1/4"-1/2"	3/8"-5/8"	3/8"-5/8"	3/8"-3/4"	3/8"-3/4"	3/8"-3/4"	3/8"-3/4"
Water connection	[inch]	1/2"	1/2"	1/2"	1/2"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Rated water flow for a T° of +15°C (2)	[L/h]	80	100	120	180	270	430	425	520	600	780
Rated water flow for a T° of +30°C (2)	[L/h]	180	230	240	420	1000	2000	2300	2400	2700	2900
Maximum inlet water T° (3)	[°C]	+46	+45	+47	+45	+43	+42	+43	+42	+45	+42

(1) The unit delivers its rated cooling power for a water flow rate which depends on the inlet water temperature. The table indicates both the rated flow for a water inlet temperature of +15°C and of +30°C.
(2) If the water inlet temperature is more than +30°C, please contact us.
(3) The proper operation of the equipment is not guaranteed beyond the maximum water inlet temperature. This can, among others, cause premature wear of the compressor.
(4) The cables type and gauge are indicative. They correspond to an installation with a LTB indoor unit without electrical heating option.

Options

		WITHOUT LPS	WITH LPS
Enhanced noise insulation	WITHOUT	AH	BH
	WITH	CH	DH

Low pressure switch (LPS): *stops the compressor in case of a too low pressure to protect the unit (lack of refrigerant gas, leakage …).*
Enhanced noise insulation: *Soundproofing with high density absorbent insulation foam to reduce sound pressure.*

Accessories

Size		07	09	14	18	24	36	40	50	64	80
Disconnecting switch	Code	SET001YY						SET002YY			
Water filter	Code	SWT001YY				SWT002YY					
Water hoses set	Code	SWT004YY				SWT005YY					

Disconnecting switch: *ensures a mechanical separation of the unit from its power supply. Can be secured in open position with a padlock.*
Water filter: *Stainless steel PN16 sieve filter, to be connected to the water inlet of the condensing unit.*

Association with indoor units

Size		07	09	14	18	24	36	40	50	64	80
Wall mounted units	Cf. p.36	•	•	•	•	•					
Consoles	Cf. p.37			•	•	•	•				
Cassettes	Cf. p.38			•	•	•	•	•	•		
Ducted units	Cf. p.39	•	•	•	•	•	•	•	•	•	•

R407C

Size		209	09-14	214	09-18	14-18	14-24	218	18-24	18-36	224	24-36	236
Model		FW209Q6	FW0914Q6	FW214Q6	FW0918Q6	FW1418Q6	FW1424Q6	FW218Q6	FW1824Q6	FW1836Q6	FW224Q6	FW2436Q6	FW236Q6
Model code		WQF201	WQF202	WQF204	WQF203	WQF205	WQF206	WQF207	WQF208	WQF209	WQF210	WQF211	WQF212
Size of each circuit		09 | 09	09 | 14	14 | 14	09 | 18	14 | 18	14 | 24	18 | 18	18 | 24	18 | 36	24 | 24	24 | 36	36 | 36
Rated cooling power (1)	[kW]	2,5 | 2,5	2,5 | 3,3	3,3 | 3,3	2,5 | 5,0	3,3 | 5,0	3,3 | 7,0	5,0 | 5,0	5,0 | 7,0	5,0 | 8,8	7,0 | 7,0	7,0 | 8,8	8,8 | 8,8
EER	-	2,95 | 2,95	2,95 | 2,95	2,95 | 2,95	2,95 | 3,12	2,95 | 3,12	2,95 | 3,68	3,12 | 3,12	3,12 | 3,68	3,12 | 3,14	3,68 | 3,68	3,68 | 3,14	3,14 | 3,14
Electrical power supply	V-Ph-Hz	230-1-50	230-1-50	230-1-50	230-1-50	230-1-50	230-1-50	230-1-50	230-1-50	230-1-50	230-1-50	230-1-50	230-1-50
Rated absorbed electrical power	[kW]	1,6	1,9	2,2	2,4	2,7	3,0	3,2	3,5	4,4	3,8	4,7	5,6
Rated current	[A]	9,0	10,2	11,4	13,0	14,2	15,0	17,0	17,8	21,7	18,6	22,5	26,4
Maximum current	[A]	9,4	11,3	13,2	13,5	15,4	17,6	17,6	19,8	23,4	22,0	25,6	29,2
Power supply cable	[mm²]	3 x 2,5	3 x 2,5	3 x 4,0	3 x 4,0	3 x 4,0	3 x 4,0	3 x 4,0	3 x 4,0	3 x 6,0	3 x 6,0	3 x 6,0	3 x 6,0
Connection cable (4)	[mm²]	2 x (4 x 1,5)	2 x (4 x 1,5)	2 x (4 x 1,5)	2 x (4 x 1,5)	2 x (4 x 1,5)	2 x (4 x 1,5)	2 x (4 x 1,5)	2 x (4 x 1,5)	2 x (4 x 1,5)	2 x (4 x 1,5)	2 x (4 x 1,5)	2 x (4 x 1,5)
Dimensions (LxDxh)	[mm]	800x360 x630	800x360 x630	800x360 x630	864x469 x835	864x469 x835	864x469 x835	864x469 x835	864x469 x835	864x469 x835	864x469 x835	864x469 x835	864x469 x835
Weight	[kg]	66	69	72	84	87	88	91	92	98	93	99	105
Sound pressure (at 1m)	[dB(A)]	49	49	49	50	50	50	50	50	50	51	51	51
Liquid line	[inch]	1/4" | 1/4"	1/4" | 1/4"	1/4" | 1/4"	1/4" | 1/4"	1/4" | 1/4"	1/4" | 3/8"	1/4" | 1/4"	1/4" | 3/8"	1/4" | 3/8"	3/8" | 3/8"	3/8" | 3/8"	3/8" | 3/8"
Suction line	[inch]	3/8" | 3/8"	3/8" | 1/2"	1/2" | 1/2"	3/8" | 1/2"	1/2" | 1/2"	1/2" | 5/8"	1/2" | 1/2"	1/2" | 5/8"	1/2" | 5/8"	5/8" | 5/8"	5/8" | 5/8"	5/8" | 5/8"
Water connection	[inch]	1/2"	1/2"	1/2"	3/4"	3/4"	3/4"	3/4"	3/4"	1"	1"	1"	1"
Rated water flow for a T° of +15°C (2)	[L/h]	200	240	240	280	300	390	360	450	610	540	700	860
Rated water flow for a T° of +30°C (2)	[L/h]	460	470	480	650	660	1240	840	1420	2420	2000	3000	4000
Maximum inlet water T° (3)	[°C]	+45	+45	+47	+45	+45	+43	+45	+43	+42	+43	+42	+42

(1) The unit delivers its rated cooling power for a water flow rate which depends on the inlet water temperature. The table indicates both the rated flow for a water inlet temperature of +15°C and of +30°C.

(2) If the water inlet temperature is more than +30°C, please contact us.

(3) The proper operation of the equipment is not guaranteed beyond the maximum water inlet temperature. This can, among others, cause premature wear of the compressor.

(4) The cables type and gauge are indicative. They correspond to an installation with a LTB indoor unit without electrical heating option.

Options

		WITHOUT LPS	WITH LPS
Enhanced noise insulation	WITHOUT	AH	BH
	WITH	CH	DH

- **Low pressure switch (LPS):** stops the compressor in case of a too low pressure to protect the unit (lack of refrigerant gas, leakage …).
- **Enhanced noise insulation:** Soundproofing with high density absorbent insulation foam to reduce sound pressure.

Accessories

Size		209	09-14	214	09-18	14-18	14-24	218	18-24	18-36	224	24-36	236
Disconnecting switch	Code	SET001YY											
Water filter	Code	SWT003YY											
Water hoses set	Code	SWT006YY											

Disconnecting switch: ensures a mechanical separation of the unit from its power supply. Can be secured in open position with a padlock.
Water filter: Stainless steel PN16 sieve filter, to be connected to the water inlet of the condensing unit.

Association with indoor units

The indoor units are associated depending on the size of each circuit in the same way as for the mono circuits FA. Refer to the table page 25 (FW- Cooling only - monosplits).

FW Cooling only Range - Trisplits - NEO

Water-cooled condensing Units

> TRISPLITS

R407C

Size		309	209-14	09-214	209-18	09-14-18	09-218	314	214-18	1 4-218	318
Model		FW309Q6	FW20914Q6	FW09214Q6	FW20918Q6	FW091418Q6	FW09218Q6	FW314Q6	FW21418Q6	FW14218Q6	FW318Q6
Model code		WQF301	WQF302	WQF303	WQF304	WQF305	WQF306	WQF307	WQF308	WQF309	WQF310
Size of each circuit		09 09 09	09 09 14	09 14 14	09 09 18	09 14 18	09 18 18	14 14 14	14 14 18	14 18 18	18 18 18
Rated cooling power (1)	[kW]	2,5 2,5 2,5	2,5 2,5 3,3	2,5 3,3 3,3	2,5 2,5 5,0	2,5 3,3 5,0	2,5 5,0 5,0	3,3 3,3 3,3	3,3 3,3 5,0	3,3 5,0 5,0	5,0 5,0 5,0
EER	-	2,95 2,95 2,95	2,95 2,95 2,95	2,95 2,95 2,95	2,95 2,95 3,12	2,95 2,95 3,12	2,95 3,12 3,12	2,95 2,95 2,95	2,95 2,95 3,12	2,95 3,12 3,12	3,12 3,12 3,12
Electrical power supply	V-Ph-Hz	230-1-50	230-1-50	230-1-50	230-1-50	230-1-50	230-1-50	230-1-50	230-1-50	230-1-50	230-1-50
Rated absorbed electrical power	[kW]	2,4	2,7	3,0	3,2	3,5	4,0	3,3	3,8	4,3	4,8
Rated current	[A]	13,5	14,7	15,9	17,5	18,7	21,5	17,1	19,9	22,7	25,5
Maximum current	[A]	14,1	16,0	17,9	18,2	20,1	22,3	19,8	22,0	24,2	26,4
Power supply cable	[mm²]	3 x 4,0	3 x 4,0	3 x 4,0	3 x 4,0	3 x 6,0	3 x 6,0	3 x 4,0	3 x 6,0	3 x 6,0	3 x 6,0
Connection cable (4)	[mm²]	3 x (4 x 1,5)	3 x (4 x 1,5)	3 x (4 x 1,5)	3 x (4 x 1,5)	3 x (4 x 1,5)	3 x (4 x 1,5)	3 x (4 x 1,5)	3 x (4 x 1,5)	3 x (4 x 1,5)	3 x (4 x 1,5)
Dimensions (LxDxh)	[mm]	864x469x835	864x469x835	864x469x835	864x469x835	864x469x835	864x469x835	864x469x835	864x469x835	864x469x835	864x469x835
Weight	[kg]	97	100	103	104	107	111	106	110	114	118
Sound pressure (at 1m)	[dB(A)]	52	52	52	52	52	52	53	53	53	54
Liquid line	[inch]	1/4" 1/4" 1/4"	1/4" 1/4" 1/4"	1/4" 1/4" 1/4"	1/4" 1/4" 1/4"	1/4" 1/4" 1/4"	1/4" 1/4" 1/4"	1/4" 1/4" 1/4"	1/4" 1/4" 1/4"	1/4" 1/4" 1/4"	1/4" 1/4" 1/4"
Suction line	[inch]	3/8" 3/8" 3/8"	3/8" 3/8" 1/2"	3/8" 1/2" 1/2"	3/8" 3/8" 1/2"	3/8" 1/2" 1/2"	3/8" 1/2" 1/2"	1/2" 1/2" 1/2"	1/2" 1/2" 1/2"	1/2" 1/2" 1/2"	1/2" 1/2" 1/2"
Water connection	[inch]	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
Rated water flow for a T° of +15°C (2)	[L/h]	300	320	340	380	400	460	360	420	480	540
Rated water flow for a T° of +30°C (2)	[L/h]	690	700	710	880	890	1070	720	900	1080	1260
Maximum inlet water T° (3)	[°C]	+45	+45	+45	+45	+45	+45	+47	+45	+45	+45

(1) The unit delivers its rated cooling power for a water flow rate which depends on the inlet water temperature. The table indicates both the rated flow for a water inlet temperature of +15°C and of +30°C
(2) If the water inlet temperature is more than +30°C, please contact us.
(3) The proper operation of the equipment is not guaranteed beyond the maximum water inlet temperature. This can, among others, cause premature wear of the compressor.
(4) The cables type and gauge are indicative. They correspond to an installation with a LTB indoor unit without electrical heating option.

Options

		WITHOUT LPS	WITH LPS
Enhanced noise insulation	WITHOUT	AH	BH
	WITH	CH	DH

- **Low pressure switch (LPS):** stops the compressor in case of a too low pressure to protect the unit (lack of refrigerant gas, leakage …).
- **Enhanced noise insulation:** Soundproofing with high density absorbent insulation foam to reduce sound pressure.

Accessories

Size		309	209-14	09-214	209-18	09-14-18	09-218	314	214-18	14-218	318
Disconnecting switch	Code	SET001YY									
Water filter	Code	SWT003YY									
Water hoses set	Code	SWT006YY									

Disconnecting switch: ensures a mechanical separation of the unit from its power supply. Can be secured in open position with a padlock.
Water filter: Stainless steel PN16 sieve filter, to be connected to the water inlet of the condensing unit.

Association with indoor units

The indoor units are associated depending on the size of each circuit in the same way as for the mono circuits FW. Refer to the table page 25 (FW - cooling only - monosplits).

Water-cooled condenser Split System - NEO

FW Reversible Range

On water loop only !

FW

Direct Expansion

The unit is installed inside the building. Calories are evacuated in (cooling mode) or drawn from (heating mode) in a water loop.

Indoor Units

⊕ MI

⊕ CI

⊕ KI

⊕ GI

Applications

- Shopping malls, offices.
- Industry.

Product benefits

- No outdoor unit.
- No grid on the facade of the building
- Small-sized and easy to install.
- ON/OFF : easy to maintain.
- Adapted to to **high** temperature water-loops.
- Included as standard feature: water flow switch, anti-freeze thermostat and water filter.

Build your PART NUMBER (P/N)

W	R	F	2	0	2	D	H

MODEL CODE 6 characters — OPTIONS Pack 2 characters

Don't forget to order the accessories you may need !

Refrigerant connections

- Max length : 20 m.
- Max height difference : 5 m.
- Preloaded for 4 m of refrigerant lines.

The power ratings indicated in the tables are "total power" and are delivered for an indoor air (indoor unit inflow) of +27°C/50% RH (cooling mode) and +20°C (heating mode). Notice: the power available to cool down the inside air ("sensible power") equals the "total power" minus the power absorbed by the condensation of air moisture (condensate).

FW Reversible Range - Monosplits - NEO

Water-cooled condensing Units

R407C

Size		07	09	14	18	24	36	40	50	64	80
Model		FW07R6	FW09R6	FW14R6	FW18R6	FW24R6	FW36R6	FW40RY	FW50RY	FW64RY	FW80RY
Model code		WRF101	WRF102	WRF103	WRF104	WRF105	WRF106	WRF107	WRF108	WRF109	WRF110
Rated cooling power (1)	[kW]	2,0	2,5	3,3	5,0	7,0	8,8	9,5	12,3	14,0	17,5
Rated heating power (1)	[kW]	2,6	3,2	4,0	6,0	7,6	10,0	10,8	13,5	15,5	19,0
EER	-	2,85	2,95	2,95	3,12	3,68	4,4	3,65	3,85	3,58	3,8
COP	-	3,7	3,9	3,6	3,7	4,0	5	4,1	4,2	3,9	4,1
Electrical power supply	V-Ph-Hz	230-1-50	230-1-50	230-1-50	230-1-50	230-1-50	230-1-50	400-3-50+N	400-3-50+N	400-3-50+N	400-3-50+N
Rated absorbed electrical power	[kW]	0,8	0,8	1,1	1,6	1,9	2,0	2,6	3,2	3,9	4,6
Rated current	[A]	3,8	4,5	5,7	8,5	9,3	9,5	5,2	5,7	7,0	8,2
Maximum current	[A]	4,1	4,7	6,6	8,8	11,0	19	7,3	8,4	10,5	12,4
Power supply cable	[mm²]	3 x 1,5	3 x 1,5	3 x 1,5	3 x 2,5	3 x 2,5	3 x 4,0	5 x 2,5	5 x 2,5	5 x 2,5	5 x 2,5
Connection cable	[mm²]	5 x 1,5	5 x 1,5	5 x 1,5	5 x 1,5	5 x 1,5	5 x 1,5	5 x 1,5	5 x 1,5	5 x 1,5	5 x 1,5
Dimensions (LxDxh)	[mm]	600x360x630	600x360x630	600x360x630	600x360x630	600x360x630	800x360x630	864x469x835	864x469x835	864x469x835	864x469x835
Weight	[kg]	47	48	51	55	56	71	81	84	88	92
Sound pressure (at 1m)	[dB(A)]	49	49	49	50	51	51	51	51	52	52
Liquid line - Suction line	[inch]	1/4"-3/8"	1/4"-3/8"	1/4"-1/2"	1/4"-1/2"	3/8"-5/8"	3/8"-5/8"	3/8"-3/4"	3/8"-3/4"	3/8"-3/4"	3/8"-3/4"
Water connection	[inch]	1/2"	1/2"	3/4"	3/4"	3/4"	3/4"	1"	1"	1"	1"
Rated water flow (1) for an inlet water T° of +38°C (cooling mode) (2) and +20°C (heating mode) (3)	[L/h]	350	400	580	1100	1200	2000	2100	2600	2800	3000
Pressure drop	[mbar]	80	100	130	150	150	150	150	150	200	200

(1) The unit delivers its rated cooling power for a water flow rate which depends on the inlet water temperature. The table indicates the rated flow for a water inlet temperature of +38°C (cooling mode) and of +20°C (heating mode).

(2) In cooling mode, with the rated water flow, the minimum water inlet temperature is +25°C and the maximum water inlet temperature is +40°C.

(3) In heating mode, with the rated water flow, the minimum water inlet temperature is +15°C and the maximum water inlet temperature is +30°C.

The proper operation of the equipment is not guaranteed outside the above indicated water inlet min/max temperature range. This can, among others, cause premature wear of the compressor. If the water temperature is outside the indicated range, please contact us.

Options

		WITHOUT LPS	WITH LPS
Enhanced noise insulation	WITHOUT	AH	BH
	WITH	CH	DH

Low pressure switch (LPS): stops the compressor in case of a too low pressure to protect the unit (lack of refrigerant gas, leakage …).

Enhanced noise insulation: Soundproofing with high density absorbent insulation foam to reduce sound pressure.

Accessories

Size		07	09	14	18	24	36	40	50	64	80
Disconnecting switch	Code	SET001YY						SET002YY			
Water hoses set		SWT004YY						SWT005YY			

Disconnecting switch : Ensures a mechanical separation of the unit from its power supply. Can be secured in open position with a padlock.

Association with indoor units

Size		07	09	14	18	24	36	40	50	64	80
Wall mounted units	Cf. p.36	•	•	•	•	•					
Consoles	Cf. p.37			•	•	•	•	•	•		
Cassettes	Cf. p.38			•	•	•	•				
Ducted units	Cf. p.39	•	•	•	•	•	•	•	•	•	•

FW Reversible Range - Bisplits - NEO

Water-cooled condensing Units

> BISPLITS

R407C

Size		209		09-14		09-18		214		14-18		14-24		218		18-24		18-36		224		24-36		236	
Model		FW209R6		FW0914R6		FW0918R6		FW214R6		FW1418R6		FW1424R6		FW218R6		FW1824R6		FW1836R6		FW224R6		FW2436R6		FW236R6	
Model code		WRF201		WRF202		WRF203		WRF204		WRF205		WRF206		WRF207		WRF208		WRF209		WRF210		WRF211		WRF212	
Size of each circuit		09	09	09	14	09	18	14	14	14	18	14	24	18	18	18	24	18	36	24	24	24	36	36	36
Rated cooling power (1)	[kW]	2,5	2,5	2,5	3,3	2,5	5,0	3,3	3,3	3,3	5,0	3,3	7,0	5,0	5,0	5,0	7,0	5,0	8,8	7,0	7,0	7,0	8,8	8,8	8,8
Rated heating power (1)	[kW]	3,2	3,2	3,2	4,0	3,2	6,0	4,0	4,0	4,0	6,0	4,0	7,6	6,0	6,0	6,0	7,6	6,0	10,0	7,6	7,6	7,6	10,0	10,0	10,0
EER	-	2,95	2,95	2,95	2,95	2,95	3,12	2,95	2,95	2,95	3,12	2,95	3,68	3,12	3,12	3,12	3,68	3,12	4,4	3,68	3,68	3,68	4,4	4,4	4,4
COP	-	3,9	3,9	3,9	3,6	3,9	3,7	3,6	3,6	3,6	3,7	3,6	4,0	3,7	3,7	3,7	4,0	3,7	5,0	4,0	4,0	4,0	5,0	5,0	5,0
Electrical power supply	V-Ph-Hz	230-1-50		230-1-50		230-1-50		230-1-50		230-1-50		230-1-50		230-1-50		230-1-50		230-1-50		230-1-50		230-1-50		230-1-50	
Rated absorbed electrical power	[kW]	1,6		1,9		2,4		2,2		2,7		3,0		3,2		3,5		3,6		3,8		3,9		4,8	
Rated current	[A]	9,0		10,2		13,0		11,4		14,2		15,0		17,0		17,8		18,0		18,6		18,8		22,7	
Maximum current	[A]	9,4		11,3		13,5		13,2		15,4		17,6		17,6		19,8		27,8		22,0		30,0		33,6	
Power supply cable	[mm²]	3 x 2,5		3 x 2,5		3 x 4,0		3 x 4,0		3 x 4,0		3 x 4,0		3 x 4,0		3 x 4,0		3 x 6,0		3 x 6,0		3 x 6,0		3 x 6,0	
Connection cable	[mm²]	2 x (5 x 1,5)		2 x (5 x 1,5)		2 x (5 x 1,5)		2 x (5 x 1,5)		2 x (5 x 1,5)		2 x (5 x 1,5)		2 x (5 x 1,5)		2 x (5 x 1,5)		2 x (5 x 1,5)		2 x (5 x 1,5)		2 x (5 x 1,5)		2 x (5 x 1,5)	
Dimensions (LxDxh)	[mm]	864x469 x835		864x469 x835		864x469 x835		864x469 x835		864x469 x835		864x469 x835		864x469 x835		864x469 x835		864x469 x835		864x469 x835		864x469 x835		864x469 x835	
Weight	[kg]	94		97		101		100		104		105		108		109		124		110		125		130	
Sound pressure (at 1m)	[dB(A)]	51		51		52		52		52		52		52		52		52		53		53		53	
Liquid line	[inch]	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	1/4"	3/8"	1/4"	1/4"	1/4"	3/8"	1/4"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"
Suction line	[inch]	3/8"	3/8"	3/8"	1/2"	3/8"	1/2"	1/2"	1/2"	1/2"	1/2"	1/2"	5/8"	1/2"	1/2"	1/2"	5/8"	1/2"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"
Water connection	[inch]	3/4"		3/4"		3/4"		3/4"		3/4"		3/4"		3/4"		3/4"		1"		1"		1"		1"	
Rated water flow (1) for an inlet water T° of +38°C (cooling mode) (2) et +20°C (heating mode) (3)	[L/h]	800		1040		1600		1160		1960		2060		2200		2300		3100		2400		3200		4000	
Pressure drop	[mbar]	100		130		150		130		150		150		150		150		150		150		150		150	

(1) The unit delivers its rated cooling power for a water flow rate which depends on the inlet water temperature. The table indicates the rated flow for a water inlet temperature of +38°C (cooling mode) and of +20°C (heating mode).

(2) In cooling mode, with the rated water flow, the minimum water inlet temperature is +25°C and the maximum water inlet temperature is +40°C.

(3) In heating mode, with the rated water flow, the minimum water inlet temperature is +15°C and the maximum water inlet temperature is +30°C.

The proper operation of the equipment is not guaranteed outside the above indicated water inlet min/max temperature range. This can, among others, cause premature wear of the compressor. If the water temperature is outside the indicated range, please contact us.

Options

		WITHOUT LPS	WITH LPS
Enhanced noise insulation	WITHOUT	AH	BH
	WITH	CH	DH

Low pressure switch (LPS): *stops the compressor in case of a too lo pressure to protect the unit (lack of refrigerant gas, leakage …).*

Enhanced noise insulation: *Soundproofing with high density absorbent insulation foam to reduce sound pressure..*

Accessories

Size		209	09-14	09-18	214	14-18	14-24	218	18-24	18-36	224	24-36	236
Disconnecting switch	Code	SET001YY											
Water hoses set	Code	SWT006YY											

Disconnecting switch : *Ensures a mechanical separation of the unit from its power supply. Can be secured in open position with a padlock.*

Association with indoor units

The indoor units are associated depending on the size of each circuit in the same way as for the mono circuits FW. Refer to the table page 29 (FW- Reversible - monosplits).

FW Cooling only Range - Monosplits

Water cooled condensing units

> MONOSPLITS

Reduced water consumption (-20% to -40% >> ideal for city-centres

More silent

GWP < 750 with A1 non inflamable gas >> ideal for shopping malls

R513A

Alternative for R407C



Size		09	18	36	50	80
Model		FW09Q6	FW18Q6	FW36Q6	FW50QY	FW80QY
Model code		WQG102	WQG104	WQG106	WQG108	WQG110
Rated cooling power (1)	[kW]	2,5	5,0	8,5	12,5	17,0
EER	[-]	2,31	2,52	2,33	1,96	2,58
Power supply	V-Ph-Hz	230-1-50	230-1-50	230-1-50	400-3-50+N	400-3-50+N
Rated absorbed power	[kW]	1,1	2,0	3,7	6,4	6,6
Rated current	[A]	4,9	9,3	18,6	11,0	11,8
Maximum current	[A]	6,5	12,5	20,5	11,5	13,5
Power supply cable	[mm²]	3 x 1.5	3 x 2.5	3 x 4	5 x 2.5	5 x 2.5
Connection cable (4)	[mm²]	4 x 1.5	4 x 1.5	4 x 1.5	4 x 1.5	4 x 1.5
Dimensions (LxDxH)	[mm]	600x310x430	600x310x430	800x360x630	864x469x835	864x469x835
Weight	[kg]	31	44	66	121	128
Sound pressure (at 1m)	[dB(A)]	46	42	45	49	50
Liquid line - Suction line	[inch]	1/4"-1/2"	3/8"-5/8"	3/8"-3/4"	3/8"-7/8"	1/2"-1 1/8"
Water connection - Male	[inch]	1/2"	1/2"	3/4"	3/4"	3/4"
Rated water flow for a T° of +15°C	[L/h]	70	150	270	360	490
Rated water flow for a T° of +30°C (2)	[L/h]	100	250	510	600	890
Maximum water inlet temperature (3)	[°C]	+50	+50	+50	+50	+50

(1) The unit delivers its rated cooling power for a water flow rate, which depends on the water inlet temperature. The table shows the nominal flow rate for water inlet temperatures of +15°C and +30°C.

(2) If the water inlet temperature is higher than +30°C, please contact us.

(3) Proper operation of the equipment is not guaranteed above the maximum water inlet temperature. This can in particular lead to premature wear of the compressor.

(4) The cable types and cross-sections are given for information only and correspond to an installation with LTB indoor units without the electric heating option.

(5) The dimensions are understood to be excluding valves. Make sure to respect the service spaces.

Options

		WITHOUT LPS	WITH LPS
Enhanced noise insulation	WITHOUT	AH	BH
	WITH	CH	DH

Low pressure switch (LPS) : stops the compressor in case of a too low pressure to protect the unit (lack of refrigerant gas, leakage…).

Enhanced noise insulation : Soundproofing with high density absorbent insulation foam to reduce sound pressure.

Accessories

Size		09	18	36	50	80
Disconnecting switch	Code	SET001YY			SET002YY	
Water filter	Code	SWT001YY		SWT002YY		
Water inlet and outlet connection hoses	Code	SWT004YY		SWT005YY		

Disconnecting switch : makes it possible to mechanically separate the condensing unit from its electrical supply. It allows locking in the open position.

Water filter : Stainless steel PN16 sieve filter, to be connected to the water inlet of the condensing unit.

Water-cooled condensation, information and precautions

Water-cooled condensation is used for the FW, CMHE, CMCE and CMVE ranges . The unit can be connected either to a water loop, to drawn water or to lost water. Precautions are necessary for proper operation of a water-cooled condensation installation.

> Reversible Models / Heating function

FW, CMHE and CMCE ranges are proposed as cooling only as well as reversible models. In heating mode, the calories are drawn from a flow of water and are injected in the air of the room.

Warning! Please note that reversible models can only be connected to a closed water loop.

Indeed, the water flow must be guaranteed to avoid freezing up of the plate heat exchanger of the unit and the breakage that would result.

When there is no water loop available and it is therefore not possible to install a reversible unit, it is possible to have an electrical heating function with resistor. This option is available for cassette type and ducted type indoor units (see pages 36 and 37), as well as for CMHE and CMCE monobloc air conditioners.

> Safety and Protections

For safety and equipment protection, the water-cooled condensing units include the following devices.

	Cooling only models	Reversible models	Function	Reset
Pressostatic water valve	yes	no	Limitates the water flow rate to the minimum necessary in order to save water and protect the compressor.	Not applicable
Pressostat HP	yes		If HP is too high: compressor cut-out for security of the equipment and for protecting the compressor.	Manual
Water flow controller	no	yes	Differential pressure switch. In heating mode, in case of too low water flow rate, it activates the reversing valve to switch to cooling mode and avoid the freezing of the plate heat exchanger.	Automatic
Anti frost thermostat (water flow)	no	yes	In heating mode, it activates the reversing valve to switch to cooling mode and avoid the freezing of the plate heat exchanger.	Manual
Low Pressure Switch (LPS)	Option (1)		Compressor cut-out if LP is too low in order to protect the compressor.	Automatic (1)

(1) For the CMVE range, the LPS pressure switch is a standard feature and it resets manually. For the other models, the LPS pressure switch is an option and it resets automatically.

> Water inlet temperature and flow rate

The proper operation of a water-cooled condensing unit depends on the quality of the heat exchange between the refrigerant fluid and water to evacuate calories (cooling mode) or draw calories (heating mode).

***The water inlet temperature and flow rate are essential parameters** for the proper operation of the installation. Indeed, the water flow and the water inlet temperature must be adapted to one another. The water inlet temperature must also be within the specified operating range (T° min / T° max).*

For example, in cooling mode, a temperature too high or a water flow too low flow will not allow sufficient heat dissipation. The unit will then not be able to operate properly and may possibly stop with a HP cut-out.

The tables below summarize the conditions leading to a malfunction of the unit or a lockout:

> Cooling-only Models

Mode	Water inlet temperature		Water flow rate	Trouble
Cooling	a bit too high	or	a bit too low	Delivered power lower than rated power
Cooling	too high	or	too low	Lockout (HP cut-out)

> Reversible Models

Mode	Water inlet temperature		Water flow rate	Trouble
Cooling	a bit too high	or	a bit too low	Delivered power lower than rated power
Cooling	too high	or	too low	Lockout (HP cut-out)
Cooling	too low	or	too high	Premature wear of the compressor
Heating	a bit too low	or	a bit too low	Delivered power lower than rated power
Heating	too low	or	too low	Lockout (antifreeze thermostat or flow switch) or premature wear of the compressor
Heating	too high	or	too high	Lockout (HP cut-out) or premature wear of the compressor

The "cooling only" models are designed to operate properly when supplied with city water, assuming a temperature around +15°C and a water pressure around 4 bar, with a large tolerance around these values .

However, when used on a water loop (cooling-only or reversible models), it is essential to check the loop water temperature (summer and winter) and guaranteed flow rate with the operator of the loop. Refer to the tables to know the temperature and flow conditions to be met. Contact us to check that these data are compatible with the unit.

Warning! For reversible models, it is necessary to install a device for measuring and adjusting the feeding water flow for each machine.

> Specific maintenance

When used with lost water, it is necessary to periodically check the proper functioning of the pressure valve so as to prevent from a malfunction resulting from the deposit of limescale with a risk of an excessive water consumption. For very hard water, it is recommended to install a device to soften water.

> Useful to know

We can adapt the units to higher or lower loop temperatures than those rated in the catalog. Do not hesitate to contact us.

We also carry out trisplit reversible water-cooled condensing units upon request. Please, contact us.

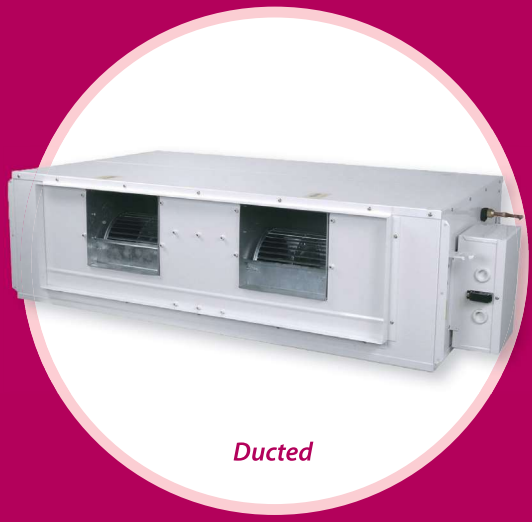
Indoor Units

Wall mounted , Consoles, Cassettes, Ducted

Wall mounted units

Floor mounted / Ceiling Consoles

Cassettes



Ducted

Indoor units

Wall mounted units

Discrete backlit display (conceable)

Characteristics

- Infrared remote control
- 3-speed fan
- Daily scheduling
- Backlit display (conceable)
- Compatible with R407C, R410A and R513A refrigerants
- Module "LTB Connect" non compatible with these wall mounted units

Wall mounted units can be used :

- For cooling only (with a cooling-only condensing unit)
- For cooling + thermodynamic heating (with a reversible condensing unit)

					
Part number		**UMS301WA**	**UMS302WA**	**UMS303WA**	**UMS304WA**
Model		**MI07-09**	**MI14**	**MI18**	**MI24**
Cooling power (1)	[kW]	2 à 2,5	3,3	5	7
Heating power (1) (2)	[kW]	2,6 à 3,2	4	6	8
Power supply	V-Ph-Hz	230-1-50	230-1-50	230-1-50	230-1-50
Rated absorbed power	[W]	40	40	61	96
Rated current	[A]	0,2	0,2	0,3	0,5
Air flow (HS)	[m3/h]	600	620	950	1200
Sound pressure at 1m (LS)	[dB(A)]	34	34	38	43
Dimensions (LxDxH)	[mm]	765x205x280	830x205x280	930x230x330	1100x230x330
Net weight	[kg]	8	8,5	12,5	14,5
Liquid line Suction line	[inch]	1/4" - 3/8"	1/4" - 1/2"	1/4" - 1/2"	3/8" - 5/8" (3)

(1) Performances given for an air intake temperature of +27°C / 50% RH in cooling mode, +20°C in heating mode
(2) The mentioned heating power is for use with a reversible condensing unit.
(3) Unit delivered with an adapter for 3/8" - 5/8" connection, IU side.

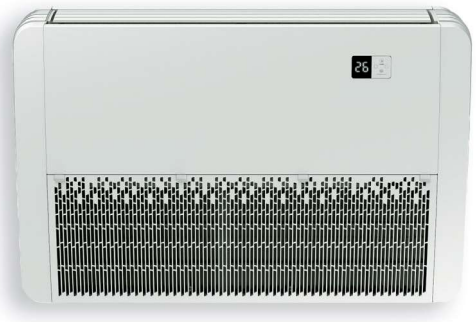
The indoor units are associated with the condensing units of the same size (ex: MI18 with FW18 or FA18)

Indoor units

Floor mounted/CeilingConsoles

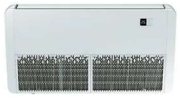
Characteristics

- Floor mounted or under ceiling installed
- Infrared remote control
- 3-speed fan
- Daily scheduling
- Compatible with R407C, R410A and R513A refrigerants



Consoles can be used :

- for cooling only (with a cooling-only condensing unit
- for cooling + thermodynamic heating (with a reversible condensing unit



Part number		UCS101WA	UCS102WA	UCS103WA
Model		CI14-18	CI24	CI36
Cooling power (1)	[kW]	3,3 à 5	7	8,8
Heating power (1) (2)	[kW]	3,85 à 5,85	7,6	9,37
Power supply	V-Ph-Hz	230-1-50	230-1-50	230-1-50
Rated absorbed power	[W]	59	59	110
Rated current	[A]	0,60	0,60	1,70
Air flow (HS)	[m3/h]	1200	1200	1500
Sound pressure at 1m (LS)	[dB(A)]	48	48	52
Dimensions (LxDxh)	[mm]	1050x235x675	1050x235x675	1300x235x675
Net weight	[kg]	25	26,5	32
Liquid line - suction line	[inch]	1/4" - 1/2"	3/8" - 5/8"	3/8" - 3/4"

(1) Performances given for an air intake temperature of +27°C / 50% RH in cooling mode, +20°C in heating mode.

(2) The mentioned heating power is for use with a reversible condensing unit.

Accessory

Model	CI14-18	CI24	CI36
"LTB Connect" Module	TAD001YY		

LTB Connect Module : allows remote control and savings by programming.

The indoor units are associated with the condensing units of the same size (ex: CI24 with FW24 or FA24)

Indoor Units

Cassettes

Characteristics

- Infrared remote control
- 3-speed fan
- Daily scheduling
- Compatible with R407C and R410A fluids
- Condensate lift pump included

Cassettes can be used:

- For cooling only (with a cooling-only condensing unit)
- For cooling + thermodynamic heating (with a reversible condensing unit)
- For cooling + Electrical heating with resistor (with a cooling only condensing unit)

Part number		UKS001WA	UKS002WA	UKS003WA	UKS004WA
Model		KI14-18S (600*600)	KI14-18 (900*900)	KI24-36 (900*900)	KI40-50 (900*900)
Rated cooling power (1)	[kW]	3,3 à 5	3,3 à 5	7 à 8,8	9,5 à 12,3
Rated heating power (1) (2)	[kW]	3,85 à 5,85	3,85 à 5,85	7,6 à 9,37	10,3 à 13,4
Electrical power supply	V-Ph-Hz	230-1-50	230-1-50	230-1-50	230-1-50
Rated absorbed electrical power	[W]	30	30	35	60
Rated current	[A]	0,40	0,40	0,45	0,60
Air flow (HS)	[m3/h]	700	850	1200	1600
Sound pressure at 1m (LS)	[dB(A)]	43	41	48	49
Embedding dimensions (LxDxh)	[mm]	580x580x275	850x850x240	850x850x240	850x850x280
Panel dimensions (LxDxh)	[mm]	650x650x30	950x950x45	950x950x45	950x950x45
Net weight	[kg]	28	33	33	36
Liquid line - Suction line	[inch]	1/4" - 1/2"	1/4" - 1/2"	3/8" - 5/8"	1/2" - 3/4"

(1) Rated performance is given for a sucked air temperature of +27°C / 50% RH in cooling mode and +20°C in heating mode.

(2) Rated heating power when used with a LTB reversible condensing unit.

Cassettes with "Electrical heating" option

Part number : Cassettes with electrical heating, associated with a condensing group WITH LP Switch OPTION		-	UKS002WG	UKS003WG	UKS004WG
Part number : Cassettes with electrical heating, associated with a condensing group WITHOUT LP Switch OPTION		-	UKS002WE	UKS003WE	UKS004WE
Model		KI14-18S (600*600)	KI14-18 (900*900)	KI24-36 (900*900)	KI40-50 (900*900)
Heating power (electrical heating)	[kW]	-	1,4	2,1	2,1
Rated current	[A]	-	6,4	9,5	9,5

The other data are identical to those of the model without electrical heating (see table above).

Warning: cassettes with electrical heating are turned to electromechanical control. Flaps movement and infrared controller are disabled. The control becomes a wired remote controller.

The indoor units are associated with the condensing units of the same size (ex: KI14-18 with FW18 or with FA18 or with FW14 ...)

Indoor Units

Ducted

Characteristics

- Wired remote control with temperature sensor
- Possibility to control with an infrared remote control (on demand)
- 3-speed fan
- Low noise level
- Daily scheduling
- Compatible with R407C and R410A fluids

Ducted units can be used:

- For cooling only (with a cooling-only condensing unit)
- For cooling + thermodynamic heating (with a reversible condensing unit)
- For cooling + Electrical heating with resistor (with a cooling only condensing unit)



Part number		UGS101WA	UGS102WA	UGS201WA	UGS202WA	UGS204WA	UGS301WA	UGS302WA
Model		GI07-09/30Pa	GI14-18/30Pa	GI14-18/75Pa	GI24/75Pa	GI36-40/75Pa	GI36-40/150Pa	GI50-64-80/150Pa
Rated cooling power (1)	[kW]	2 à 2,5	3,3 à 5	3,3 à 5	7	8,8 à 9,5	8,8 à 9,5	12,3 à 17,5
Rated heating power (1) (2)	[kW]	2,6 à 3,2	3,85 à 5,85	3,85 à 5,85	7,6	9,67 à 10,3	9,67 à 10,3	13,4 à 18,7
Electrical power supply	V-Ph-Hz	230-1-50	230-1-50	230-1-50	230-1-50	230-1-50	230-1-50	230-1-50
Rated absorbed electrical power	[W]	40	60	90	120	180	350	500
Rated current	[A]	0,45	0,60	0,95	1,44	2,04	3,60	5,75
Air flow LS/MS/HS	[m3/h]	425/459/510	867/937/1020	816/918/1020	1122/1241/1360	1513/1785/2040	1649/1836/2040	2482/2754/3060
Sound pressure at 1m ducted - LS/MS/HS	[dB(A)]	35/36/37	35/37/39	27/38/40	38/40/42	39/40/42	50/59/64	57/63/67
Dimensions (LxDxh)	[mm]	665x440x212	930x470x215	1020x580x290	1130x490x240	1340x580x290	1205x730x370	1425x730x370
Net weight	[kg]	20	27	27	34	51	53	62
Liquid line - Suction line	[inch]	1/4" - 3/8"	1/4" - 1/2"	1/4" - 1/2"	3/8" - 5/8"	3/8" - 3/4"	3/8" - 3/4"	3/8" - 7/8"

(1) Rated performance is given for a sucked air temperature of +27°C / 50% RH in cooling mode and +20°C in heating mode

(2) Rated heating power when used with a LTB reversible condensing unit.

Ducted units with "Electrical heating" option

Part number		UGS101WB	UGS102WB	UGS201WB	UGS202WB	UGS204WB	UGS301WB	UGS302WB
Model		GI07-09/30Pa	GI14-18/30Pa	GI14-18/75Pa	GI24/75Pa	GI36-40/75Pa	GI36-40/150Pa	GI50-64-80/150Pa
Heating power (electrical heating)	[kW]	2	2	2	4	6	4	6
Electrical power supply	V-Ph-Hz	230-1-50	230-1-50	230-1-50	230-1-50	230-1-50	230-1-50	230-1-50
Rated current	[A]	9,2	9,2	10,5	19,8	29,5	22	33,5

The other data are identical to those of the model without electrical heating (see table above).

The installation must ensure with an aeraulic study that the available pressure of the selected unit (30 Pa, 75 Pa or 150 Pa) is adapted to the pressure drop of the suction duct, the discharge duct and the grids, in order to meet the rated airflow. For silent installation, it is recommended to use isophonic air ducts to absorb the noise blown by the fan.

The indoor units are associated with the condensing units of the same size (ex: GI24/75Pa with FW24 or with FA24)